



COUNTY OF SAN DIEGO
Great Government Through the General Management System – Quality, Timeliness, Value
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION

CLASSIFIED

RETIREMENT TECHNOLOGY SYSTEMS SPECIALIST

Class No. 007550

■ CLASSIFICATION PURPOSE

To perform complex work in the analysis and design of a computer network system in the San Diego County Employees Retirement Association (SDCERA); to revise or develop systems, which integrate application development languages across multiple computing platforms and operating systems; to perform a variety of duties in the research, design, testing, development, implementation, and modification of specialized software applications utilized by SDCERA; to serve as technical advisor to SDCERA management; and to perform related work as required.

■ DISTINGUISHING CHARACTERISTICS

The Retirement Technology Systems Specialist is an advanced journey-level class responsible for performing advanced network system integration using a detailed knowledge of client/server relationships, application development languages, and relational databases for SDCERA's computing environment; testing modifications of existing software applications; and performing complex applications programming analysis. Under general supervision, this class is responsible for network systems supporting the administration of the retirement trust fund, confidential personnel and payroll records, and transactions for members of the County Employees' Retirement System (CERS). This position differs from the Retirement Technology Systems Technician in that the latter is responsible for desktop support.

■ FUNCTIONS

The examples of functions listed in the class specification(s) are representative but not necessarily exhaustive or descriptive of any one position in the class(es). Management is not precluded from assigning other related functions not listed herein if such functions are a logical assignment for the position.

Essential Functions:

1. Evaluates the effectiveness of SDCERA's local area network systems after installation and modifies systems as required.
2. Develops controls to assure adherence to operating standards across multiple platforms.
3. Analyzes technical problems or potential problems, and recommends solutions and alternatives.
4. Develops detailed system design specifications and procedures.
5. Performs feasibility studies to determine basic software and hardware requirements.
6. Writes PC-based and server-based computer programs.
7. Performs software and hardware maintenance and resolves technical problems as they arise.
8. Performs back-up and recovery procedures of system files and data.
9. Serves as the liaison between SDCERA, County information systems specialists, and outside vendors.
10. Prepares reports and makes presentations as required.
11. Prepares technical writings such as documentation, user manuals, instructions and reports.
12. Provides training to end-users as necessary.
13. Trains desktop support and other information technology support staff.
14. Troubleshoots existing programs and makes requests to modify applications to eliminate problems or correct errors.
15. Provides responsive, high quality service to County employees, representatives of outside agencies and members of the public by providing accurate, complete and up-to-date information, in a courteous, efficient and timely manner.

Retirement Technology Systems Specialist: QUALITY ASSURANCE OPTION

In addition to essential functions listed above:

1. Develops test scenarios and use cases to ensure thorough testing of new applications and modifications.
2. Tests application programming scripts and modifications to ensure proper execution of applications.
3. Assists SDCERA staff in unit, integration, and user acceptance testing (UAT).
4. Provides assistance in debugging programs and resolving software problems.
5. Reviews systems design, program listings, and other systems documentation to ensure technical quality.
6. Writes program documentation.
7. Consults with internal customers on information technologies and systems in order to address business needs.
8. Defines software application requirements, functionality, and utilization.
9. Troubleshoots existing programs and makes requests to modify applications to eliminate problems or correct errors.
10. Participates in the development of SDCERA programming and documentation standards.
11. Writes test code and test scripts for software applications.
12. Assists in the implementation of enhancements to hardware and software applications.
13. Utilizes best practices to ensure quality assurance.

NETWORK ENGINEER OPTION

In addition to essential functions listed above:

1. Installs, configures, and maintains LAN based routing and switching devices, file/print, electronic mail, and specialized servers.
2. Administers SDCERA's LAN/WAN hardware software and network infrastructure.
3. Conducts technical engineering studies to design and integrate SDCERA's network solutions.
4. Develops protocol for network operations and prepares operation procedures for network security.
5. Oversees SDCERA's firewall configuration, intrusion detection and prevention systems and evaluates effects of network security changes with other networks.
6. Assists in managing SDCERA's Information Assurance Program.

■ KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

- Network connectivity and communications components of Local Area Networks (LANs), Wide Area Networks (WANs), file servers, and gateways.
- Operating systems and environments.
- Communication protocols required by network management software.
- Hardware and software tools for developing client/server applications requiring imaging, bar coding, animation, video, graphics, speech, or sound components.
- Microsoft Office and Visio applications.
- HTTP programming using Front Page and related web site applications.
- Configuration of Cisco and Windows 2000 Active Directory
- Protocols of TCP/IP, SMTP, SNMP.
- County customer service objectives and strategies.

Quality Assurance Option (In addition to the above):

- Principles, methods, and techniques of systems analysis and design.
- Applications development methods and tools.
- Preparation and documentation of systems modifications.

- Methods and techniques for troubleshooting applications problems.
- Principles, practices, and methods of systems administration and maintenance.
- Disaster recovery techniques.

Network Engineer Option (In addition to the above):

- Data processing methods, equipment types, systems applications, and management principles.
- Automation resources.
- Methods for analysis of communication requirements and supporting equipment configurations.
- Operating procedures, technical methods, and communication principles.
- Networking and general systems design and development.
- Policies, directives, and other regulatory guidance concerning Information Assurance.
- Current and applicable network security related technology

Skills and Abilities to:

- Analyze and understand the interaction of multiple computing platforms for information sharing, system synchronization and integrity, data validation, relational editing, system security, system back up and recovery processing, and change management.
- Evaluate, modify, and test, new and existing client/server systems.
- Learn and apply new technology to existing client/server computing environments.
- Detect problem areas and recommend solutions
- Communicate clearly and effectively both orally and in writing.
- Establish and maintain cooperative working relationships among technical support staff, end users, contractors, and vendor representatives.
- Supervise and coordinate work of assigned technology staff.
- Treat County employees, representatives of outside agencies and members of the public with courtesy and respect.
- Assess the customer's immediate needs and ensure customer's receipt of needed services through personal service or referral.
- Exercise appropriate judgment in answering questions and releasing information; analyze and project consequences of decisions and/or recommendations.
- Perform complex systems analysis, design, development, and testing.
- Plan, organize, and complete projects efficiently and according to internal standards.

Quality Assurance Option (In addition to the above):

- Implement and maintain various applications.
- Perform complex systems analysis, design, development, and testing.
- Apply a variety of application programming languages.
- Install, test, and configure new and existing software applications and programs.
- Troubleshoot and resolve software problems.
- Collect, evaluate, and interpret data, either in statistical or narrative form.
- Prepare clear, concise, and accurate reports and other documents.

Network Engineering Option (In addition to the above):

- Perform studies and project current and future technological needs.
- Administer and support 3-Tier Web Based Architectures, Cisco Routers and Switches, HP Switches, VLAN's and VPN's, FortiGate Firewall and IDS, Dell Power Edge Server Configurations, Windows 2000/2003, SQL Server 2000/2003, SQL Server: Reporting Services, Exchange 2000/2003, MS Active Directory Configurations, Veritas Backup Exec for Windows, and Microsoft Reporting Services.
- Analyze and identify necessary components in order to insure network capacity to support processing requirements.
- Provide technical expertise for analysis, development, maintenance, and modification of network/systems.

■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrate possession of the knowledge, skills and abilities listed above. Examples of qualifying education/experience are:

1. A bachelor's degree from an accredited college or university in computer science, information systems or a closely related field, AND three (3) years of progressively responsible experience performing the functions listed above under the specific option (Quality Assurance or Network Engineer) OR
2. Two (2) years as a Retirement Technology Systems Technician.

Notes:

- (1) Additional years of qualifying experience may substitute for the education requirement on a year for year basis.
- (2) Microsoft certification is highly desirable.

■ ESSENTIAL PHYSICAL CHARACTERISTICS

The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classification(s). Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.

Frequent: sitting, repetitive use of hands to operate computers, printers, and copiers. Work consists of intermittent physical labor, must be able to lift up to 75 pounds.

■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

License

None Required

Certification/Registration

None Required.

Working Conditions

Occasional evening hours may be required.

Background Investigation

Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a background investigation.

Probationary Period

Incumbents appointed to permanent positions in this class shall serve a probationary period of 12 months (Civil Service Rule 4.2.5).

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